

Charge to Thematic Breakout groups

Consider synergies & ways to inform & leverage individual project efforts.

Discuss research synthesis ideas & activities.

Incorporate Phase2 projects in Phase1 activities

If possible, outline contents of publications as a working framework.

- **Field & Remote Sensing measurements**
 - What are the (remaining) key knowledge gaps & needs?
 - Ways to fill primary data gaps & needs?
 - What complementarity in mapping & scaling efforts?
 - How might data / observations inform management needs?
- **Informing Modeling efforts**
 - Broader suite of *in situ* mmts for cal-val?
 - What data are lacking wrt informing & assessing models?
 - How can models best inform vulnerability assessments?
 - Utilize model-data framework, comparisons, benchmarking?

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- **What Phase 1 activities will continue & which if any will expire?**
 - For those continuing, how will they change with phase2?
 - For those expiring, what is the history?
 - Completed, publication(s) expected
 - Abandoned due to.... (no lead, no longer relevant, no support)
- **Specifically revisit synthesis activities & update those**
 - What are the ongoing synthesis efforts?
 - Who specifically is leading / will lead them?
 - What publications are expected

ABOVE WG Coordination & Synthesis Activities

Carbon Dynamics:

Changes in seasonal amplitude of CO₂ concentrations

CH₄ data/knowledge gaps

Aquatic carbon fluxes

Partitioning net ecosystem exchange components

C Flux measurements in permafrost ecosystems (*with Hydrology/Permafrost WG*)



Hydrology / Permafrost:

Active Layer Distribution - synthesize & assess active layer depths (*with SAR WGs*)

Freeze-thaw dynamics and timing (*with C Dynamics WG*)

Lake trends – comparison of methods & long-term trends in lake area, and drivers

Snow properties – crosscutting synthesis activity *with Wildlife WG*

Fire Disturbance:

Wildfire soil carbon combustion synthesis

Post-fire forest regrowth composition & trajectories (*with Veg Dynamics WG*)

Vegetation Dynamics:

Succession/recovery following disturbances (*with Fire WG*)

Forest greening/browning including role of climate & insects in forest decline

Tundra greening/browning including shrub expansion & densification



Thematic Breakouts

➤ 5 breakout groups (chair): rooms

1. Fire Disturbance (Laura B-C): Room 150

2. Ecosystem Services / Knowledge co-production (Natalie Boelman): Room 155

3. Carbon Dynamics (Colm Sweeney): Plenary Room

4. Vegetation Dynamics (Howie Epstein): Room 165

5. Hydrology and Permafrost (Mahta M): Room 160

Self-select to breakouts

➤ If you have multiple project participants, go to different WGs

Assign / volunteer a rapporteur